UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,596	08/29/2003	Daniel C. Biederman	CISCO-7506	8906

49715 7590 11/14/2006

CISCO - THELEN REID & PRIEST LLP
THELEN REID & PRIE LLP
P.O. BOX 640640
SAN JOSE, CA 95164-0640

EXAMINER	
BROWN, MICHAEL J	

ART UNIT	PAPER NUMBER
2116	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/651,596	BIEDERMAN, DANIEL C.	
	Examiner	Art Unit	
	Michael J. Brown	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-40 rejected under 35 U.S.C. 102(b) as being anticipated by Bell(US Patent 6,701,443).

As to claim 1, Bell discloses a network power system for delivering inline power, the system comprising a first power source equipment(power apparatus 26, see Fig. 3) having at least one output power interface capable of transmitting inline power, and a first powered device(device 22-B, see Fig. 3) having an input power interface capable of receiving inline power. Bell also discloses a first transmission media(connections 28, see Fig. 3) capable of carrying inline power and having a first end and a second end, wherein the first end is coupled to the at least one output power interface of the first power source equipment and the second end is coupled to the input power interface of the first powered device, wherein the first power source equipment or the powered device includes a first negotiator(control circuitry 80, see Fig. 3) capable of communicating with a second negotiator(powerability indicator formed by diode 70 and resistor 72, see Fig. 3 and column 5, lines 38-39) that is associated with other power source equipment and/or other powered devices(device 22-A, see Fig. 3) to thereby negotiate a resolution at least one inline power allocation issue arising from existing or

predicted changes in power draw requirements and/or power supply characteristics communicated to the first negotiator by the other negotiator(see column 6, lines 16-30).

As to claim 2, Bell discloses the system wherein the negotiator at least participates in the formation of a negotiated decision with respect to the at least one inline power allocation issue(see column 6, lines 16-30).

As to claim 3, Bell discloses the system wherein the negotiator performs at least one response function based on a negotiated decision with respect to the at least one inline power allocation issue(see column 6, lines 16-30).

As to claim 4, Bell discloses the system further comprising a non-powered device including a negotiator capable of communicating and resolving at least one inline power allocation issue(see column 6, lines 16-30).

As to claim 5, Bell discloses the system wherein the at least one powered device further includes an output power interface capable of transmitting inline power, the system further comprising at least a second powered device(device 22-A, see Fig. 3) having an input power interface capable of receiving inline power, and a second transmission media(connecting medium 24, see Fig. 3) capable of carrying inline power and having a first end and a second end, wherein the first end is coupled to the output power interface of the at least one powered device and the second end is coupled to the input power interface of the at least the second powered device(see column 4, lines 21-23).

As to claim 6, Bell discloses the system wherein the at least a second powered device further includes the negotiator(control circuitry 80, see Fig. 3) capable of communicating and resolving at least one inline power allocation issue.

As to claim 7, Bell discloses a method of inline power allocation for a network power system having at least two components(power apparatus 26 and devices 22, see Fig. 3) coupled together, wherein at least a first component(power apparatus 26, see Fig. 3) is a power source equipment capable of transmitting inline power, at least a second component(devices 22, see Fig. 3) is a powered device capable of receiving inline power, and at lease one of the at least two components includes a first negotiator(control circuitry 80, see Fig. 3) capable of communicating and resolving at least one inline power allocation issue. Bell further discloses the method comprising identifying an inline power allocation issue arising from existing or predicted changes in power draw requirements and/or power supply characteristics communicated to the first negotiator by a second negotiator(powerability indicator formed by diode 70 and resistor 72, see Fig. 3 and column 5, lines 38-39) associated with other power source equipment and/or other powered devices(device 22-A, see Fig. 3)(see column 4, lines 39-47), communicating as suitable within the network power system(see column 4, lines 48-54), and reaching a negotiated decision in an effort to resolve the identified inline power allocation issue(see column 6, lines 16-30).

As to claim 8, Bell discloses the method further comprising responding based on the negotiated decision in an effort to resolve the identified inline power allocation issue(see column 6, lines 16-30).

As to claim 9, Bell discloses the method wherein responding comprises reclassifying at least one component in the network power system(see column 4, lines 52-54).

As to claim 10, Bell discloses an apparatus for inline power allocation for a network power system having at least two components(power apparatus 26 and devices 22, see Fig. 3) coupled together, wherein at least a first component(power apparatus 26, see Fig. 3) is a power source equipment capable of transmitting inline power, at least a second component(devices 22, see Fig. 3) is a powered device capable of receiving inline power, and at lease one of the at least two components includes a first negotiator(control circuitry 80, see Fig. 3) capable of communicating and resolving at least one inline power allocation issue. Bell further discloses the apparatus comprising means for identifying an inline power allocation issue arising from existing or predicted changes in power draw requirements and/or power supply characteristics communicated to the first negotiator by a second negotiator(powerability indicator formed by diode 70 and resistor 72, see Fig. 3 and column 5, lines 38-39) associated with other power source equipment and/or other powered devices(device 22-A, see Fig. 3)(see column 4, 39-47), means for communicating as suitable within the network power system(see column 4, lines 48-54), and means for reaching a negotiated decision in an effort to resolve the identified inline power allocation issue(see column 6, lines 16-30).

As to claim 11, Bell discloses the apparatus further comprising means for responding based on the negotiated decision in an effort to resolve the identified inline power allocation issue(see column 6, lines 16-30).

As to claim 12, Bell discloses a computer-readable medium(remote powerability system 60, see Fig. 3) having stored thereon computer-executable instructions for performing a method of inline power allocation for a network power system having at least two components(power apparatus 26 and devices 22, see Fig. 3) coupled together, wherein at least a first component(power apparatus 26, see Fig. 3) is a power source equipment capable of transmitting inline power, at least a second component(device 22-A, see Fig. 3) is a powered device capable of receiving inline power, and at lease one of the at least two components includes a first negotiator(control circuitry 80, see Fig. 3) capable of communicating and resolving at least one inline power allocation issue. Bell further discloses the method comprising identifying an inline power allocation issue arising from existing or predicted changes in power draw requirements and/or power supply characteristics communicated to the first negotiator by a second negotiator(powerability indicator formed by diode 70 and resistor 72, see Fig. 3 and column 5, lines 38-39) associated with other power source equipment and/or other powered devices(device 22-A, see Fig. 3)(see column 4, lines 39-47), communicating as suitable within the network power system(see column 4, lines 48-54), and reaching a negotiated decision in an effort to resolve the identified inline power allocation issue(see column 6, lines 16-30).

As to claim 13, Bell discloses the computer-readable medium wherein the method further comprises responding based on the negotiated decision in an effort to resolve the identified inline power allocation issue(see column 6, lines 16-30).

As to claim 14, Bell discloses the computer-readable medium wherein responding comprises reclassifying at least one component in the network power system(see column 4, lines 52-54).

As to claim 15, Bell discloses a power source equipment(PSE) (power apparatus 26, see Fig. 3) for a network power system for delivering inline power, the PSE comprising at least one output power interface(connections 28, see Fig. 3) capable of transmitting inline power, and at least one negotiator(control circuitry 80, see Fig. 3) capable of communicating and at least partially resolving at least one inline power allocation issue arising from existing or predicted changes in power draw requirements and/or power supply characteristics communicated to the at least one negotiator by a second negotiator(powerability indicator formed by diode 70 and resistor 72, see Fig. 3 and column 5, lines 38-39) associated with other power source equipment and/or powered devices(device 22-A, see Fig. 3)(see column 6, lines 16-30).

As to claim 16, Bell discloses the PSE wherein the negotiator of the PSE is one of a plurality of negotiators in the network power system and the negotiator in the PSE has primary authority for reaching a negotiated decision in an effort to resolve the at least one inline power allocation issue(see column 6, lines 16-30).

As to claim 17, Bell discloses the PSE wherein the negotiator of the PSE is one of a plurality of negotiators in the network power system and the negotiator in the PSE has substantially equal authority for reaching a negotiated decision in an effort to resolve the at least one inline power allocation issue(see column 6, lines 16-30).

As to claim 18, Bell discloses the PSE wherein the negotiator of the PSE takes the form of a single unit(see column 6, lines 16-30).

As to claim 19, Bell discloses the PSE wherein the negotiator of the PSE takes the form of two sub-units with a first sub-unit being centralized and a second sub-unit being associated with the at least one output power interface(see column 6, lines 16-30).

As to claim 20, Bell discloses the PSE wherein the second sub-unit of the negotiator of the PSE is inoperative when no inline power is being transmitted from the at least one output power interface(see column 6, lines 16-30).

As to claim 21, Bell discloses the PSE wherein the negotiator of the PSE is embedded into a physical layer of the PSE(see column 6, lines 16-30).

As to claim 22, Bell discloses the PSE wherein the negotiator of the PSE is capable of performing at least one response function based on a negotiated decision in an effort to resolve the at least one inline power allocation issue(see column 6, lines 16-30).

As to claim 23, Bell discloses the PSE wherein the at least one response function includes at least reducing the transmission of inline power from the at least one output power interface(see column 4, lines 61-67).

As to claim 24, Bell discloses the PSE wherein the at least one response function includes transmitting a request that a component coupled to the at least one output power interface act to at least reduce the consumption of inline power from the at least one output power interface(see column 4, lines 48-54).

As to claim 25, Bell discloses the PSE wherein the at least one response function includes terminating the transmission of inline power from the at least one output power interface to all but one powered device coupled to the at least one output power interface(see column 5, lines 1-7).

As to claim 26, Bell discloses the PSE wherein the at least one response function includes reclassifying at least one powered device coupled to the at least one output power interface(see column 4, lines 52-54).

As to claim 27, Bell discloses the PSE wherein the negotiator of the PSE maintains at least one piece of information selected from the group consisting of a present total inline power output, a maximum total inline power output, a present inline power output per power interface, a maximum inline power output per power interface, a status of the PSE, and an amount of power supplied to the PSE(see column 4, lines 39-41).

As to claim 28, Bell discloses the PSE wherein the negotiator of the PSE considers at least one factor selected from the group consisting of a power interface priority, a powered device priority, a powered device type, a PSE operation mode, a powered device operation mode, a powered device power draw, a time limit, a time schedule, and a power reserve level(see column 4, lines 39-41).

As to claim 29, Bell discloses a powered device(PD)(power apparatus 26, see Fig. 3) for a network power system for delivering inline power, the PD comprising an input power interface(connections 28, see Fig. 3) capable of receiving inline power, and a negotiator(control circuitry 80, see Fig. 3) capable of communicating and at least

partially resolving at least one inline power allocation issue arising from existing or predicted changes in power draw requirements and/or power supply characteristics communicated to the negotiator by a second negotiator(powerability indicator formed by diode 70 and resistor 72, see Fig. 3 and column 5, lines 38-39) associated with the power source equipment and/or other powered devices(device 22-A, Fig. 3)(see column 6, lines 16-30).

As to claim 30, Bell discloses the PD wherein the negotiator of the PD is one of a plurality of negotiators in the network power system and the negotiator in the PD has primary authority for reaching a negotiated decision in an effort to resolve the at least one inline power allocation issue(see column 6, lines 16-30).

As to claim 31, Bell discloses the PD wherein the negotiator of the PD is one of a plurality of negotiators in the network power system and the negotiator in the PD has substantially equal authority for reaching a negotiated decision in an effort to resolve the at least one inline power allocation issue(see column 6, lines 16-30).

As to claim 32, Bell discloses the PD wherein the negotiator of the PD is inoperative when no inline power is being drawn by the PD from the input power interface(see column 4, lines 34-47).

As to claim 33, Bell discloses the PD wherein the negotiator of the PD is embedded into a physical layer of the PD(see column 4, lines 34-47).

As to claim 34, Bell discloses the PD wherein the negotiator of the PD is capable of performing at least one response function based on a negotiated decision in an effort to resolve the at least one inline power allocation issue(see column 6, lines 16-30).

As to claim 35, Bell discloses the PD wherein the at least one response function includes at least reducing the amount of inline power drawn by the PD from the input power interface(see column 4, lines 61-67).

As to claim 36, Bell discloses the PD wherein the PD further comprises an output power interface for transmitting inline power and the at least one response function includes transmitting a request that a component coupled to the output power interface act to at least reduce the consumption of inline power from the output power interface(see column 4, lines 48-54).

As to claim 37, Bell discloses the PD wherein the PD further comprises an output power interface for transmitting inline power and the at least one response function includes terminating the transmission of inline power from the output power interface(see column 5, lines 1-7).

As to claim 38, Bell discloses the PD wherein the at least one response function includes reclassifying the PD(see column 4, lines 52-54).

As to claim 39, Bell discloses the PD wherein the negotiator of the PD maintains at least one piece of information selected from the group consisting of a present power draw, a maximum power draw, a predicted power draw, a PD type, a PD operation mode, a PD Quality-of-service level, and a PD operating schedule(see column 4, lines 39-41).

As to claim 40, Bell discloses the PD wherein the negotiator of the PD considers at least one factor selected from the group consisting of a power source equipment power interface priority, a PD priority, a PD type, a power source equipment operation

mode, a PD operation mode, a PD power draw, a time limit, a time schedule, and a power source equipment power reserve level(see column 4, lines 39-41).

Response to Arguments

2. Applicant's arguments filed 8/23/2006 have been fully considered but they are not persuasive. Applicant argues that Bell does not disclose negotiations between two negotiators that provide a negotiated decision to any power allocation issues that may arise. Examiner disagrees as Bell discloses as Bell discloses negotiations between control circuitry 80(see Fig. 3) and powerability indicator(combination of diode 70 and resistor 72, see Fig. 3) that provide a negotiated decision to any power allocation issues that may arise(see column 5, lines 36-49 and column 6, lines 16-37).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Brown whose telephone number is (571)272-5932. The examiner can normally be reached on Monday-Thursday from 7:00am to 5:30pm(EST).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIRS) system. Status information for the published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications are available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

Michael J. Brown
Art Unit 2116

REHANA PERVEEN
SUPERVISORY PATENT EXAMINER
11/9/06